Transplants and Burn Injury Treatment

KeraStat® Burn Gel and Halofuginone to Prevent Scar Contracture After Burn Injuries

No currently available burn product has shown efficacy in substantially decreasing wound healing time and preventing scar formation. The goals of this project are to expand on the results obtained in the Phase I study that showed that (1) halofuginone inhibited collagen-mediated contracture in dermal fibroblasts and (2) the presence of the keratin in the KeraStat burn product results in an attenuation of the cellular injury response following UVB irradiation. Investigators from Wake Forest University are testing two potential solutions (KeraStat and Halogel), in partnership with the manufacturer Keranetics, to determine their comparative efficacy in reducing time to wound closure and decreasing scarring in a porcine burn healing and scarring model. Following in vivo animal efficacy testing, they plan to test the efficacy of KeraStat in reducing time to wound closure and in scar prevention in an investigator-initiated 60 patient human clinical trial in partial-thickness burn patients. A follow-on clinical trial is anticipated in the next one to three years.